

# ABSTRACT

An optical film for a liquid crystal display of the present invention laminating a polarizing plate and a retardation film so that an absorption axis of the polarizing plate and a slow axis of the retardation film are perpendicular or parallel to each other, wherein the polarizing plate comprises a transparent protective film on both surfaces of a polarizer and the transparent protective film has an in-plane retardation  $Re_1 = (n_{x1} - n_{y1}) \times d_1$  is 10 nm or less and a thickness direction retardation  $R_{th} = \{(n_{x1} + n_{y1})/2 - n_{z1}\} \times d_1$  is in the range of from 30 nm to 100 nm, and the retardation film has an Nz value represented by  $Nz = (n_{x2} - n_{z2})/(n_{x2} - n_{y2})$  is in the range of from 0.1 to 0.8 and an in-plane retardation  $Re_2 = (n_{x2} - n_{y2}) \times d_2$  is in the range of from 60 to 300 nm. The optical film of the invention realizes a high contrast ratio over a wide range and a better view in a case where the optical film is applied to a liquid crystal display driving in IPS mode.